Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

rve
967
C78

United States Department of Agriculture
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
Washington 25, D. C.

COOPERATIVE ECONOMIC INSECT REPORT

Vol. 1 For two-week period ending September 14, 1951 No. 4

The extensive range grasshopper control program in Wyoming conducted cooperatively by Federal and State Agencies and private land owners was concluded during August. The results were considered excellent. Adult surveys conducted immediately after cessation of control operations revealed only light and spotted populations on range lands in eastern Wyoming. Approximately 450,000 acres were treated compared with 2,400,000 in 1950.

Dusting sulfur supplies for 1952 may be 20 to 25 percent less than in 1951. Synthetic sulfur substitutes can be used in pesticides and NPA has assured the Department that measures will be taken to insure increased supplies of these substitutes. Pest control practices for next year need be planned with sulfur shortages in mind. (USDA, Agriculture in National Defense, No. 27, August 29, 1951).

Summary of Insect Conditions

European corn borer infestations light throughout the Corn Belt.

Grasshoppers causing crop damage in some localities according to reports to August 18. The first record of damage to crops in Alaska received from Palmer.

Fall armyworm infestations along the Atlantic Seaboard and in Mississippi.

Codling moth second-brood larvae still active in New Jersey, Ohio, and southern Illinois.

Red-banded leaf roller infestations reported from Massachusetts, New Jersey, Ohio, and southern Illinois.

Mexican bean beetle infestations normal in the eastern part of the country; heavy infestations in the Arkansas Valley of Colorado.

Colorado potato beetle infestations heavy in northwestern North Dakota.

Tuber flea beetle causing serious injury to potato in North Platte Valley of western Nebraska and eastern Wyoming.

Beet leafhopper populations unusually large in San Joaquin Valley of California.

Boll weevil infestations comparatively light. It has spread to western Kentucky and southern Illinois for the first time in several years.

Bollworms damaging cotton in some places.

Spider mites severely damaging cotton in northern Alabama and causing some damage in Arkansas.

Summary of the Insecticide Situation

Insecticides are sufficient in southern Illinois unless red-banded leaf roller becomes sufficiently abundant to necessitate use of TDE. The supply of TDE now on hand is all there is available. Any sudden excessive demand by growers would exhaust the supply.

CEREAL AND FORAGE INSECTS

European corn borer (*Pyrausta nubilalis* (Hbn.)) -- Second-generation moth emergence about complete apparently throughout the Corn Belt. Oviposition light. Populations spread fairly uniformly over a large percentage of the fields. There is small possibility that areas of high infestation will develop. (EPQ and State cooperating). Second-brood damage moderate in Massachusetts. (A. I. Bourne).

Corn earworm (*Heliothis armigera* (Hbn.)) -- Infestation in Massachusetts lighter than usual. Late plantings of corn in New Jersey infested. (O. Starnes). Damage common lower Eastern Shore of Maryland in field corn varieties with ear ends uncovered by husk; earliest maturing of the same varieties escaped injury. (T. L. Bissell). Heavy infestation in late sweet corn in Kentucky. (H. H. Jewett). Infestation in canning corn in northern Utah averaging about 12 or 15 percent and increasing. (EPQ).

Grasshoppers (Acrididae) -- Adult surveys in Arizona revealed only light infestations in the northern part of the State. In the southeastern part of the State, range in contiguous areas of Graham, Cochise, and Santa Cruz Counties contain from 5 to 7 per square yard--some spots, 50 or more. Range in Colorado embracing 100,000 contiguous acres in Yuma County, not controlled this year, contains from 30 to 200 per square yard. Crop areas in southeastern Colorado have from 15 to 20 per square yard. *Melanoplus mexicanus* (Sauss.) predominates. This condition extends into parts of Stevens, Grant, Morton, Stanton, Hamilton, Greeley, Kearny, Wichita, and Scott Counties, Kans. These grasshoppers will be threat to fall-planted grain. Sorghum has been slightly damaged and additional head damage is expected before the crop matures. Adult surveys in Nebraska showed the heaviest infestations in Sioux County and parts of Scottsbluff, Morrill, and Box Butte Counties. Range heavily infested, whereas, croplands have non-economic populations. In the Black Hills area of South Dakota, *Camnula pellucida* (Scudd.) and other range species occur in heavy concentrations. Light populations in practically every valley of Lake, Sanders, and Missoula Counties, western Montana. Heaviest on range within Bison Game Refuse; as many as 30 per square yard. The Triangle area of north-central Montana has extensive, heavily infested range lands, throughout which wheat is grown. Range exceeds 30 per square yard and in many instances two or more separate blocks of range, constituting 20,000 to 30,000 acres each, so infested; dominant species, *M. mexicanus* *Aulocara elliotti* (Scudd.), and *Ageneottetix deorum* (Scudd.). Heavy concentrations of *M. bivittatus* (Say) in wheat-field margins. Populations in Triangle area constitute distinct threat to agriculture of the region. Adult surveys in Wyoming reveal light and spotted populations on range in eastern part of State and no substantial population on range in western part. In Idaho, infestations from 5 to 150 per square yard with heaviest populations in meadows, threaten 20,000 to 40,000 acres. Damage severe to browse plants used by deer for winter range. Adult surveys in Utah indicate infestations about as in 1950. In Nevada, an increase on range in east, central and southeastern parts of State. No large areas carry threatening infestations, although several rather severe spotted concentrations. In Klickitat County, Wash., several districts averaged 25 to 200 per square yard. A definite increase in range lands all along the south slope of the Columbia River from Dallesport to Roosevelt. (EPQ, Report July 29 to August 18). Adult surveys showed infestation in northwestern North Dakota much lower than expected. The heaviest infestation is in McLean County, west of Garrison, west to Nishu and north to Raub. (Weekly Ins. Pest Inf. Bul., N. D. Agr. Coll.). *M. mexicanus* (Det. A. B. Gurney), very destructive in a limited district near Palmer, Alaska. This is the first time grasshopper damage to cultivated plants observed in Alaska. (R. H. Washburn).

Corn rootworms (*Diabrotica longicornis* (Say) and *D. virgifera* Lec.) -- Considerable injury to corn in eastern half of Nebraska. (R. E. Hill).

Fall armyworm (*Laphygma frugiperda* (A. & S.)) -- Present on corn throughout New Jersey. (O. Starnes). Moderate damage to late corn in Wicomico County, Md. (T. L. Bissell). Infesting kale in eastern Virginia. (EPQ and State cooperating). Small larvae abundant on grass and young cabbage at Charleston, S. C. Some damage to vegetables in northwestern Florida and severe damage to lawn grasses in northwestern Florida and in sections of southern Georgia. (EPQ). Localized infestations scattered over most of Mississippi. (State Plant Board Inspectors).

Yellow-striped armyworm (*Prodenia ornithogalli* Guen.) -- Damaging soybeans in Leflore and Washington Counties, Miss. (D. F. Young). Damaging lima beans in Maryland. (T. L. Bissell).

Corn leaf aphid (*Aphis maidis* Fitch) -- Infestations heavy on individual plants of corn in northern and north-central Utah. Only an occasional field showed general infestation. (G. F. Knowlton).

Clover aphid (*Anuraphis bakeri* (Cowen)) -- Abundant on red clover in northern Utah. (G. F. Knowlton).

Garden fleahopper (*Halticus bracteatus* (Say)) -- Heavy infestations in red clover in Kentucky. (H. H. Jewett).

A leaf roller (Amelia pallorana (Rob.)) -- Serious infestation in alfalfa seed fields in Boxelder County, northern Utah. Small infestations in alfalfa in localities in northern and central Utah. (G. F. Knowlton).

Garden webworm (Loxostege similalis (Guen.)) -- Considerable damage to alfalfa in eastern third of Nebraska. (R. E. Hill). Light infestation on spinach in New Jersey. Injury may occur in September and October. (O. Starnes).

Sweetclover weevil (Sitona cylindricollis Fahr.) -- Second-generation adults damaging sweetclover in North Dakota. (Weekly Ins. Pest Inf. Bul., N. D. Agr. Coll.).

Green cloverworm (Plathypena scabra (F.)) -- Soybeans ragged on the Eastern Shore of Maryland. (T. L. Bissell). Beans in New Jersey infested. (O. Starnes).

FRUIT INSECTS

Codling moth (Carpocapsa pomonella (L.)) -- Some second-brood larvae still active in central and southern New Jersey apple orchards. Control in general has been very good. (A. J. Farley). Second-brood larvae damaging apples in a few orchards in Ohio; although infestation generally light. (C. R. Cutright). Light to moderate infestations in Calhoun County, Ill. (S. C. Chandler).

Red-banded leaf roller (Argyrotaenia velutinana (Wlkr.)) -- Infestation heavy in some orchards in Massachusetts. (A. I. Bourne). Amount of injury to apples above normal in New Jersey and some injury to peaches. Second-brood injury finished; young larvae, evidently third-brood, seen in Burlington, Camden, Gloucester and Cumberland Counties, first week of September. (A. J. Farley). Second-brood larvae damaging ripening peaches in Ohio. (R. W. Rings). Infestation light to moderate in Calhoun County, Ill. (S. C. Chandler).

Oriental fruit moth (Grapholitha molesta (Busck)) -- Twig injury in some orchards in Massachusetts more abundant than in last two years; third-generation larvae in peaches. (A. I. Bourne). Injury to ripening peaches in Ohio very light. (R. W. Rings). In spite of the heavy flight of late moths in the Yakima Valley of Washington, no infestation in harvested peaches or drops. (M. A. Yothers).

A leaf miner (species undetermined) -- Damage reaching commercial levels in two peach orchards in northern Ohio. (R. W. Rings).

Apple aphid (Aphis pomi Deg.) -- Increasing in Massachusetts late in August; requiring control in some orchards. (E. H. Wheeler and W. D. Whitcomb).

A stink bug (Euschistus conspersus Uhler) -- Severe injury to pears in occasional orchards in Mendocino, Lake, El Dorado, and Placer Counties, Calif. (H. T. Osborn).

European red mite (Paratetranychus pilosus (C. & F.)) -- Populations in Massachusetts reduced by heavy rain. (A. I. Bourne). Infestations in some orchards in New Jersey sufficient to justify control but mites difficult to find in others. (A. J. Farley). Infestations unusually heavy in orchards in Ohio where chlorinated hydrocarbon insecticides used throughout season. (R. W. Rings). Appears to have decreased in Kentucky; further control, for the most part, will not be required. (J. G. Rodriguez).

Cottony-cushion scale (Icerya purchasi Mask.) -- Heavy infestations on citrus, pittosporum, wax leaf ligustrum, etc., throughout the Rio Grande Valley of Texas. (A. N. White).

VEGETABLE INSECTS

Mexican bean beetle (Epilachna varivestis Muls.) -- Third-generation occurring in Massachusetts. Not serious earlier. (A. I. Bourne). Severe damage on lower Eastern Shore of Maryland. (T. L. Bissell). Light to moderate infestations in eastern Virginia. Conspicuous injury to one field of soybeans. Present on black-eyed peas. (EPQ and State cooperating). Less abundant than usual on lima beans at Charleston, S. C. Light infestations in Dorchester County, S. C. (EPQ). Light infestations in Oconee County, S.C. (G.H.Griffin, County Agt.). Young plantings in southern Georgia sufficiently infested to warrant control measures. (EPQ). Numerous in Gilmer County, Ga. (H. E. Chastain, County Agt.). Light to moderate infestations on snap beans in Gadsden and adjoining Counties, Florida, requiring control. (EPQ). Damaging beans in scattered localities in Mississippi. (State Plant Board Inspectors). Moderate to heavy infestations in northwestern Tennessee requiring control measures. Slight damage in southern Ohio; populations reduced by dry, hot weather. Light infestations in several dry-bean fields in North Plate Valley of Nebraska. Heavy infestations in the Arkansas Valley of Colorado. (EPQ).

Colorado potato beetle (Leptinotarsa decemlineata (Say)) -- Heavy infestations in potatoes in Williams and McKenzie Counties of northwestern North Dakota. (Weekly Ins. Pest Inf. Bul., N. D. Agr. Coll.).

Flea beetles (Epitrix spp.) -- New generation of potato flea beetle (Epitrix cucumeris (Harr.)) increasing rapidly on potatoes in the Red River Valley of North Dakota. (Weekly Ins. Pest Inf. Bul., N. D. Agr. Coll.). Tuber flea beetle (E. tuberis Gent.) causing serious injury to all plantings of potato, especially early plantings, in North Platte Valley of western Nebraska and eastern Wyoming. (EPQ).

Green peach aphid (Myzus persicae (Sulz.)) -- Heavy infestation in late potatoes in Yakima Valley of Washington. (EPQ).

Tomato fruitworm (Heliothis armigera (Hbn.)) -- Injuring tomatoes in eastern Virginia. (EPQ and State cooperating). Damage to tomatoes in Jones County, Miss. (State Plant Board Inspectors). Injuring tomato in southern California. (EPQ).

Potato leafhopper (Empoasca fabae (Harr.)) -- Moderate populations on beans in eastern Virginia. (EPQ and State cooperating). Heavy populations on beans at Chillicothe, Ohio, and moderate at Orient. (EPQ). Light infestations of leafhoppers (species undetermined) on potato in western North Dakota. (Weekly Ins. Pest Inf. Bul., N. D. Agr. Coll.).

Bean leaf roller (Urbanus proteus (L.)) -- Light infestations on lima beans at Charleston, S. C. Infestations in northwestern Florida, light but increasing. (EPQ).

Bean aphid (Aphis fabae Scop.) -- Moderate infestation on beans in Ventura County, Calif. (EPQ). Localized infestations on beans in New Jersey. (O. Starnes).

Blister beetles (Epicauta spp.) -- Injury to vegetables in northwestern Florida and beans in northwestern Tennessee. (EPQ). Three-striped blister beetle (E. lemniscata (F.)) on soybeans and garden vegetables in Tate County and cotton in Oktibbeha County, Miss. Other species attacking tomato in Oktibbeha and Washington Counties and cotton in Pike County, Miss. (State Plant Board Inspectors).

A leafhopper (Empoasca filamenta De L.) --Numerous in several celery fields in northern Utah. (G. F. Knowlton).

Sweetpotato weevil (Cylas formicarius elegantulus (Sum.)) -- Infestations in seaside morningglory scattered along the beach in Ocean Springs district of Mississippi. (M. M. Price).

Beet leafhopper (*Circulifer tenellus* (Baker)) -- Fall populations in San Joaquin Valley of California exceptionally large. About 150,000 acres of Russian thistle in critical districts have developed under conditions favorable for reproduction of the insect. Plans are underway for emergency spraying of Russian thistle to begin about October 1. (H. T. Osborn).

Beet webworm (*Loxostege sticticalis* (L.)) -- Abundant in sugar beet fields in North Platte Valley of western Nebraska and eastern Wyoming. (EPQ).

Hornworms (*Protoparce* spp.) -- Damage severe to tomatoes on the lower Eastern Shore of Maryland where spraying not continued. (T. L. Bissell). Some injury to tomatoes in eastern Virginia. (EPQ and State cooperating). On tomatoes in Washington County, Miss. (D. F. Young). Severe damage to tomatoes in West Carroll Parish, La. (EPQ). A general heavy infestation on tobacco in Charles County, Md. (G. Langford). Infestations on tobacco decreasing in northwestern Tennessee. (EPQ). The late brood has appeared in large numbers throughout the Burley tobacco area of Kentucky. (C. Brown).

COTTON INSECTS

Boll weevil (*Anthonomus grandis*Boh.) -- Examination of 6 fields in Nansemond County, Va., showed average of 92 percent injury to squares. Large bolls do not show serious injury. (W. L. Howe). Weevils found in 43 of 51 fields in 10 counties in northwestern Alabama. Only 5 fields had more than 75 percent of the squares punctured. The average infestation in 43 fields 39 percent punctured squares. Average infestation in 325 fields in the Delta section of Mississippi 12 percent punctured squares. (EPQ). In western Tennessee average infestation in infested fields 34 percent. (A. P. Morris). Light infestations in 2 of 3 fields in Fulton County and in 1 of 7 fields in Hickman County, Ky. One field in Pulaski County, Ill., had 2 percent of the squares puctures. First authentic records from Kentucky and Illinois for several Years. (EPQ). Found in 16 of 76 fields in 8 counties in southeastern Missouri. About 10 percent of the squares in the infested fields were punctured. Heaviest infestations in Butler County. These records show that the insect survived the 1950-51 winter. If conditions are favorable for the insect during September, it could cause more damage than in 1950. (EPQ). Increased in young cotton in Arkansas. (G. Barnes). Migration of weevils underway in Oklahoma and are present in most cotton-producing counties. Infestation in southwestern part of State much lighter than last year. (C. F. Stiles).

Bollworms (Heliothis spp. et el) -- Injury to large bolls varied from 8 to 12 percent in 6 fields in Nansemond County, Va. (W. L. Howe). Infestation averaged 6 percent in 23 of 51 fields in 10 northwestern Alabama counties. (EPQ). Infestations in western Tennessee. (R. P. Mullett). Large numbers of moths laying eggs on young and second-growth cotton in Arkansas. (G. Barnes). Eggs on cotton plants in Custer County, Okla. (C. F. Stiles). Prevalent over most of the cotton-growing areas of Arizona. (Weekly Cotton Ins. Report, Univ. Ariz.).

Cotton leafworm (Alabama argillacea (Hbn.)) -- Larvae taken in Orange and Marion Counties, Fla., in August. (EPQ). One moth taken in trap in Oklahoma. (F. A. Fenton). Larvae taken in Gaines and Hunt Counties, Tex. (EPQ). One specimen taken south of Canutillo, El Paso County, Tex. It could have been brought by wind. (M. O. Thompson).

Spider mites (species undetermined) -- Severe damage by spider mites and drought in the Tennessee valley section of Alabama. (F. Stewart). Large acreages of cotton damaged in the Sand Mountain area of Alabama. (W. A. Ruffin). In 20 of 51 fields in 10 counties in northwestern Alabama; 5 of the fields severely damaged, 7 moderately damaged, and 8 have small spots of infestation. (EPQ). Spreading in Arkansas, where it occurs in areas not previously infested. (G. Barnes). A few in Pinal County, Ariz. (Weekly Cotton Insect Report, Univ. Ariz.).

FOREST AND SHADE TREE INSECTS

Spruce budworm (Choristoneura fumiferana (Clem.)) -- Spruce defoliated near Palmer, Alaska. (Det. J. F. G. Clarke). (R. H. Washburn).

Sycamore lace bug (Corythucha ciliata (Say)) -- Heavy infestation on sycamores on Eastern Shore of Maryland. (T. L. Bissell). Poplars in Connecticut heavily infested. (J. P. Johnson).

Mimosa webworm (Homadaula albizziae Clarke) -- Mimosa trees two miles west of Abbottstown, Adams County, Pa., heavily infested. (E. M. Craighead). Considerable defoliation of mimosa in Wake and Guilford Counties, N. C. (D. L. Wray).

Orange-striped oakworm (Anisota senatoria (A. & S.)) -- Stripping oaks in many localized areas in the Connecticut River Valley of Connecticut. (J. P. Johnson).

MISCELLANEOUS INSECTS

California tortoise shell butterfly (*Aglais californica* (Bdv.)) -- Defoliation of mountain whitethorn ceanothus (*Ceanothus cordulatus*) in brushfields between Mariposa Grove and Mount Raymond, Modoc County, Calif. No other plant infested. Feeding completed and many new-generation butterflies present. (EPQ).

European earwig (*Forficula auricularia* L.) -- Fairly heavy infestation at Pittsfield, Berkshire County, Mass. First record in western Massachusetts. (E. H. Wheeler).

Imported fire ant (*Solenopsis saevissima richteri* Forel) -- Taken in Texas near Beaumont, Jefferson County, Orange, Orange County, and Houston, Harris County during August. (C. M. Jones). (Det. M. R. Smith).